REMARKS

Claims 9 and 11 have been canceled, and their subject matter added to claim 6. In addition, elements described at page 5, lines 2-19 of the application have been added to claim 6. No new matter has been added, and it is believed that the claims as amended distinguish the invention over the art of record.

Claims 6, 7, 10, and 11 were rejected as obvious over US 2002/0038925 A1 (Reimer) in view of U.S. 6,265,690 (Förnsel). Claims 8, 9, and 12 were rejected as obvious over Reimer in view of Förnsel and further in view of U.S. 5,972,257 (Liu). These rejections should not be applied to the claims as amended because the references as a whole do not teach or suggest the bonding process now claimed.

As amended, claim 6 calls for pretreatment of at least one surface to be bonded, the pretreatment comprising a first pretreatment step wherein the surface is contacted solely by a plasma jet at normal pressure. The first pretreatment step may be followed by a second pretreatment step that includes one or more of the grouped operations. The transitional term "consisting" limits the first pretreatment step solely to application of the plasma jet. This first step may be followed by an optional second pretreatment step that, when present, must include one or more of the recited second pretreatment steps. This process is not taught or suggested by the references as a whole.

The disclosure of Förnsel relates to an improved device for plasma surface treatment. It does not discuss specific methods of treating specific surfaces and therefore is not relevant to the distinguishing elements of claim 6. Liu is even less relevant, disclosing a process of making a foamed EVA shoe sole and not a method of preparing the surface thereof for adhesive bonding. The most relevant disclosure is found in Reimer.

Reimer describes a method of modifying the surface of a polymeric material to improve adhesion by exposing the surface to electromagnetic radiation. The electromagnetic radiation may be combined with electro-ionization, e.g. atmospheric plasma devices, at the same time or after the exposure to electromagnetic radiation. Paragraphs [0040]-[0042]. The substrate surface may be heated during or before the electromagnetic radiation or the electromagnetic radiation combined with electro-ionization. Paragraph [0047].

These disclosures do not teach the process of applicant's claim 6. In Reimer, a first pretreatment step of electromagnetic radiation occurs alone or in combination with heating or electro-ionization and may be preceded by heating. But the initial pretreatment step of the invention must be solely plasma jet treatment, excluding all other steps. Heating, or any other pretreatment steps, must, if present, always follow the plasma jet treatment in the invention. Thus the reference differs from the claims in that its electro-ionization treatment is always at the same time as or following the electromagnetic radiation, whereas

according to the invention the plasma jet treatment takes place alone and always preceding any other pretreatment steps.

To reach the invention from Reimer's process, one of skill either would have had to eliminate the electromagnetic radiation step or reverse it with the electro-ionization, i.e. electro-ionization first, followed by electromagnetic radiation. Both of these modifications of Reimer's process, however, would directly oppose Reimer's very teachings. It is well settled that no motivation to modify a reference exists where doing so would destroy the intent, purpose, or function of the reference. M.P.E.P. § 2143.01. See also In re Gordon, 221 U.S.P.Q. 1125, 1127.

One cannot eliminate Reimer's electromagnetic treatment step simply because it is at the very core of Reimer's teaching; it is the essential step of its process. On the other hand, reversing the order of electromagnetism and electro-ionization in Reimer would also defeat one of its objects.

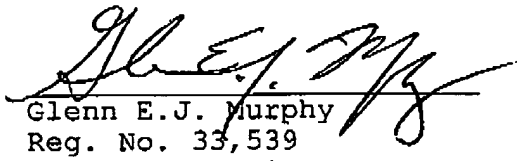
In Reimer's process electro-ionization takes place during or after electromagnetism. Paragraphs [0040], [0042]. Its electro-ionization differs from known atmospheric plasma steps in that it requires less energy. Paragraphs [0042], [0044]. It uses less energy because the electro-ionization always occurs during or after electromagnetism, when the species to be ionized are already in an excited state from the electromagnetism. Paragraph [0044]. One of skill would not have modified Reimer's

process to electro-ionize first, because it would have defeated the energy saving caused by electro-ionizing during or after the electromagnetism.

CONCLUSION

For the reasons above, one of skill would have found no motivation to modify Reimer as needed to reach applicant's claims. Absent motivation, there is no *prima facie* obviousness. Applicant respectfully asks that this Amendment be entered and that the application be reconsidered and allowed in view of the amendments and remarks above. If any fees are due to enter this paper that have not been accounted for, please charge Deposit Account No. 01-1250.

Respectfully submitted,



Glenn E.J. Murphy
Reg. No. 33,539
Attorney Applicant
(610) 278-4926

Henkel Corporation
Patent Department
2500 Renaissance Blvd., Suite 200
Gulph Mills, PA 19406